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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,800	06/25/2001	Adriaan Retief Swanepoel	0182.00001	6013

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EXAMINER

BALSIS, SHAY L

ART UNIT PAPER NUMBER

1744

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/806,800

Applicant(s)

SWANEPOEL, ADRIAAN RETIEF

Examiner

Shay L Balsis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 5, 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Quinlan et al. "*Quinlan*" (USPN 3780395).

Quinlan teaches a wiper, which includes an elongate, flexible curved backbone (21).

There is a force applying member (38) connected to the center backbone at two spaced apart points (42).

By observing the figures it is clear that the spacing between the points is between $S_1=0.1*L$ and $S_2=0.35*L$ where L is the length of the backbone and the ratio of the spacing distance between the points and the total length ($R=S/L$) is between 0.1 and 0.35.

The force applying member is connected to the backbone in such a manner to permit displacement between the force applying member and the backbone. The backbone has a constant thickness and width along its length. The backbone also has a free form curvature as well as a compound curvature when in use.

5. Claims 1-5, 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Quinlan et al. "*Quinlan*" (USPN 33751754).

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Quinlan teaches a wiper, which includes an elongate, flexible curved backbone (16).

There is a force applying member (13) connected to the center backbone at two spaced apart points (25).

By observing the figures it is clear that the spacing distance, S , between the points is between $S_1=0.1*L$ and $S_2=0.35*L$ where L is the length of the backbone and the ratio of the spacing distance between the points and the total length ($R=S/L$) is between 0.1 and 0.35. The preferred spacing distance S_p between the spaced apart points is about $S_p=0.363*L-0.000146*L^2$. The preferred ratio R_p is about $R_p=0.363-0.000146*L$.

The force applying member is connected to the backbone in such a manner to permit displacement between the force applying member and the backbone. The backbone has a constant thickness and width along its length. The backbone also has a free form curvature as well as a compound curvature when in use.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quinlan ('395) and Quinlan ('754) all in view of Swanpoel (USPN 5485650)

Both Quinlan's teach the essential elements of the claimed invention however, they fail to teach a backbone with a varying width and thickness along its length. Swanpoel teaches a wiper with an elongated curved backbone with a backbone that tapers uniformly in both thickness and

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width in a straight line manner from its center to its tips (col. 3, line 36-37). It would have been obvious to have the backbone of Quinlan's wipers vary in thickness and width along its length. Further, one of skill in the art would by routine experimentation find the optimum thickness and width for the backbone. It would have been obvious to one of skill in the art to make the thickness and width of the Quinlan vary to what is desired or required, including as claimed to optimize performance and life of the wiper.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quinlan ('395) and Quinlan ('754) all in view of Appel (USPN 3192551)

Quinlan all teach the essential elements of the claimed invention however, they fail to teach a backbone with a varying width and thickness along its length. Appel teaches a wiper with an elongated curved backbone with a backbone that tapers uniformly in both thickness and width in a straight-line manner from its center to its tips (col. 3, line 36-37). It would have been obvious to have the backbone of Quinlan's wipers vary in thickness and width along its length. Further, one of skill in the art would by routine experimentation find the optimum thickness and width for the backbone. It would have been obvious to one of skill in the art to make the thickness and width of the Quinlan vary to what is desired or required, including as claimed to optimize performance and life of the wiper.

Applicant's Arguments

- a. The prior art drawings are not to scale and cannot be properly relied upon to support a rejection.
- b. Krohm does not teach a curved backbone.

Response to Arguments

a. While drawings are not to scale and cannot be relied upon to establish particular dimensions, they can be used to determine relative sizes of components. The drawings show the spacing between the points being in the range claimed. Whether or not the drawings are to scale, they still show the ratio of length to spacing distance as is claimed. Note that applicant is not claiming a specific length or specific spacing but only a range of ratios of the two lengths.

If drawings show a component as elongated (it is longer than it is thick or wide) such would clearly be considered evidence of an elongated (ratio of length to height or width) component, even though no specific dimension were given for such component.

b. Applicant's arguments, see pages 7-9, filed 11/28/03, with respect to the Krohm '616 patent, and the Arai '326 patent have been fully considered and are persuasive. The rejection of claims 1-2, 5, 7-8, 11 with respect to Krohm and 1-5, 7-11 with respect to Arai has been withdrawn.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 571-272-1281. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Slb
1/14/04


ROBERT J. WARDEN, SR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700